

Polish and Portuguese: shared etymons, digressive lexical outputs (on the basis of colour names)

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On the face of it, Polish and Portuguese have little in common. However, since both of these languages belong to the Indo-European family, it is reasonable to expect that some common features, namely in the lexical domain that is our field of expertise, may lie somewhere, waiting to be unveiled. In this paper, we would like to present findings of research that looked for remnants of a putative ancestral relationship between Polish and Portuguese by indicating the way that some Indo-European roots have evolved and are conserved in both languages.

The basis of the analysis that we have carried out is composed of Polish and Portuguese colour adjectives. The choice of this particular subset of the lexicon is due to the fact that they present serious lexicological difficulties. Colour words refer to personal synesthetic experiences that raise conceptual problems that are similar in every language, as well as common naming issues. We have limited our study to a subset of colour adjectives, given their higher frequency and the expectation that their context of usage might help us to observe better any interesting semantic evolution.

We have checked the origin of each of the selected colour adjectives. Once its IE root has been established, we have also ascertained if it survived (in the same form or in another one, with different ablaut grades) in other words, in the same language and in the other one, with special attention paid to the meaning of these words. The output of this research allowed us to confirm that there are remnants of different Proto-Indo-European roots in contemporary Polish and Portuguese, even if they have gained slight or strongly different meanings;

on the other hand, there are synonymous roots that present a parallel semantic development from diverse IE roots. We will present some examples of both cases.

Hence, this paper looks at a tentative study of historical lexical semantics, and it also highlights that these two languages, Polish and Portuguese, although they apparently never had anything to do with each other, they still preserve traces of a remote common past.

Short presentation of Polish and Portuguese

Polish and Portuguese are akin in the sense of belonging to the same Indo-European family of languages, but they pertain to two different branches: Balto-Slavic and Italic, respectively. As both languages have had practically no direct contact with each other throughout history, one could think that they do not have much in common. Indeed, even the lexicon, which is the level of the linguistic system most likely to show contacts and influences between any two languages, does not have many correlations. There are obviously lots of words that have been borrowed in Polish and in Portuguese independently from the same source (mainly from Latin / Greek, French and English¹), but when it comes to Portuguese loanwords in Polish and to Polish loanwords in Portuguese, there are almost none – and if so, indirectly².

Let us now present an outline of the history of both languages. It should help us to demonstrate their independent and distant paths of evolution.

¹ E.g.: Pol. *demokracja*/Port. *democracia*, Pol. *teatr*/Port. *teatro*, Pol. *muzyka*/Port. *música*, Pol. *konstytucja*/Port. *constituição*, Pol. *rubryka*/Port. *rubrica*, Pol. *ordynarny*/Port. *ordinário* (Greek and Latin), Pol. *abazur*/Port. *abajur*, Pol. *żakiet*/Port. *jaqueta*, Pol. *obój*/Port. *oboé* (French), Pol. *hokej*/Port. *hóquei*, Pol. *wagon*/Port. *vagão*, Pol. *kowboj*/Port. *cowboy* (English).

² E.g. Pol. *autodafe*/auto *da fé*, *marmolada*, *kobra*, *fawela*, Port. *złoty*/zlóti, *mazurca*, *voivoda*.

POLISH³

Polish belongs to the Lechitic subgroup of West Slavic languages. It descends from Proto-Slavic which, according to most linguists, formed a common branch with Proto-Baltic named Balto-Slavic – a group of Indo-European satem languages. The dialectal segmentation of Proto-Slavic began in the 3rd century, when a part of the Slavic people started leaving their territories (covering partially contemporary Poland, Ukraine and Belarus) and moving towards the Neman river basin, Volhynia and Podolia; it continued after the 6th century with the Slavic people's migration towards the Balkan Peninsula. By 1000 AD, the Slavic linguistic area had already split into three big dialectal groups: East, West and South Slavic.

The Polish state formally came into existence in the mid-10th century. The Baptism of Poland in 966 was an important factor which helped to consolidate various tribes living within the borders of the country and to affirm its unity in the international arena. The Polish language developed on the basis of different dialects spoken in Poland, with a domination of the Greater Poland and Lesser Poland dialects. The earliest written records in Polish date back to 1136. During the synod in Łęczyca (1285), it was decided that sermons must be preached in Polish and without knowing this language one could not become a teacher in cathedral and monastery schools. The first texts in Polish, mainly translations of selected parts of the Bible, were published starting from the end of the 13th century. Polish literature flourished in the 16th century, when the Polish language was accepted on a par with Latin.

In the Middle Ages, the Polish lexicon was influenced by Czech and German. In the 16th century one can notice a bigger afflux of Italian, Latin and Greek vocabulary. In later history, a French impact was mostly remarkable, but there are also borrowings from Turkish and Eastern Slavic languages. During the 19th century, when Poland did not exist on the map of Europe because of partitions, the eastern regions of the country suffered from russification, while its western

³ For more details, see e.g. Klemensiewicz (1999).

and southern parts were subjected to German influences. In recent time, English has mainly been providing new vocabulary to Polish.

In the 16th century, after the Reformation, the importance of the Polish language had been growing in Central and Eastern Europe. In 1696, it became the official language of the Grand Duchy of Lithuania (while in Poland this position was occupied by Latin until 1763). From the mid-16th century till the beginning of the 18th century, Polish was the language used at the Russian court and by higher social classes in Russia. In the 17th century, it also played an important role in the Principalities of Moldavia and Wallachia, as well as in Ukraine.

Today, judging on the criterion of the number of users, Polish is the second most spoken Slavic language (after Russian) – by more than 40 million people living in Poland and outside the country in diaspora.

PORTUGUESE⁴

Portuguese is one of the languages arising from the fragmentation of Vulgar Latin, thus belonging to the Italic branch of the family of Indo-European languages. Vast territorial extension of the area where Latin was spoken, isolation of different territories, and existence of specific linguistic features of each geographical area were the most decisive factors behind the fragmentation process. In the northwest of the Iberian Peninsula, Galician and Portuguese shared the same birth process until the 15th century: both languages suffered the influence of substrate languages, mostly Celtic, Iberian (completely replaced by Latin in the early Middle Ages) and Basque. Later, the Germanic (5th century) and Arabic (8th century) invasions added a Germanic and Arabic lexical heritage to the Latin and pre-Latin basis. By the 10th century, in the region that now corresponds to Galicia and the north of Portugal, there was already a particular spoken romance; this romance, Galician-Portuguese, was the language of the Iberian medieval lyric until the 14th century.

The kingdom of Portugal, independent since 1143, spread to the south and to the western strip of the peninsula, thus drawing, in about a century, one of the oldest and most stable borders of Europe. The oldest document written in

⁴ For more details, see e.g. Cardeira (2006).

Portuguese dates from these times (1175); in the 13th century, the Chancellery adopted Portuguese as the written language for its royal documents.

Galician-Portuguese poetry lasted up to 1350. Yet, by the end of the 14th century Portuguese and Galician took diverging directions and Portuguese started a standardization process, which led to the development of the national language. In the 15th century an expansionist period began and Lisbon, the capital, became a commercial emporium as well as a receiver-spreader centre of Asian, African and American vocabulary. Portuguese, in addition to being spoken in America (Brazil), was also used as a communication language on the African coast and in some ports of India and Southeast Asia, which led to the formation of Portuguese-based Creoles. As the result of expansion during colonial times, Portuguese is nowadays spoken in countries located on five continents and occupies a major place among the most spoken languages in the world.

Corpus and methodological issues

As has already been mentioned, contemporary colour adjectives in Polish and Portuguese were the basis for our research. Apart from a small number of studies (i.e. Kobędza 2014, Stala & Dębowskiak 2016), there is practically no comparative work regarding Polish and Portuguese colour names, which, we believe, assigns to our study a greater interest and opportunity.

The adjectives that have been selected correspond to the eleven basic colour names as established by Berlin and Kay (1969): *white, black, red, green, yellow, blue, brown, purple, pink, orange* and *grey*. Then, supplementary criteria were applied: relatively recent adjectives (like Pol. *niebieski* 'blue', Port. *castanho* 'brown', *cor-de-rosa* 'pink', *cinzento* 'grey') as well as recent borrowings (like Pol. *brązowy* 'brown', *fioletowy* 'purple', *różowy* 'pink', *pomarańczowy* 'orange', Port. *azul* 'blue', *cor-de-laranja* 'orange') have been excluded, in order to retain only old vocabulary in the corpus – we are looking for words that have been inherited from the proto-languages of both languages under consideration: Proto-Slavic for

Polish and Latin for Portuguese⁵. Thus, we have selected twelve colour adjectives, six from each language, namely:

- Polish – *biały* ‘white’, *czarny* ‘black’, *czerwony* ‘red’, *zielony* ‘green’, *żółty* ‘yellow’ and *szary* ‘grey’;
- Portuguese – *branco* ‘white’, *preto* ‘black’, *vermelho* ‘red’⁶, *verde* ‘green’, *amarelo* ‘yellow’ and *roxo* ‘purple’.

The data related to each adjective has been collected in tables in order to provide complete and comparable information. Each table is organised as follows:

⁵ The etymology of these adjectives is quite informative:

a) Polish (cf. Stala & Dębowski 2016: 55–56):

- *niebieski* ‘blue’ (14th century) < *niebo* ‘sky’ ← Proto-Slavic **nebo*, Gen. **nebesē* ‘firmament, sky’;
- *brązowy* ‘brown’ (19th century) < *brąz* ‘brown colour; alloy of copper with other metals’ ← Fr. *bronze* ‘alloy of copper and zinc’ ← It. *bronzo* ‘alloy of copper and tin’ ← (?) Late Lat. **brundium* / **bruntium*;
- *fioletowy* ‘purple’ (17th century) < *fiolet* ‘purple colour’ ← Germ. *Violett* ‘purple; purple colour’ ← Fr. *violette* ‘viola’ < O.Fr. *virole* ‘id.’ ← Lat. *viola*;
- *różowy* ‘pink’ (18th century) < *róża* ‘rose’ ← Old High German *rōsa* ‘id.’ ← Lat. *rosa*;
- *pomarańczowy* ‘orange’ (18th century) < *pomarańcza* ‘orange’ ← It. *pomo d’arancia*, where *arancia* ‘orange’ ← Ar. *nāranġ* ← Pers. *nārang* ← Sanskr. *nāraṅga*;

b) Portuguese:

- *castanho* ‘brown’ (13th century as ‘chestnut tree’; 15th century as a colour adjective) ← Lat. *castāneus*_{Adj} ‘chestnut’ < (*nux*) *castānea*_{Nf} ‘chestnut’ ← Gr. *κάρυα καστανεία* / *καστανάια* ‘id.’ < *κάστανον* ‘id.’ ← foreign, non-IE origin;
- *cor-de-rosa* ‘pink’ (16th century) ← < *rosa* ‘rose’ ← Lat. *rosa*;
- *cinzento* ‘grey’ (16th century) < *cinza* ‘ash’ ← Lat. **cinīsia* ‘ashes mixed with embers’ < *cinis*, Gen. *cineris* ‘ash’;
- *azul* ‘blue’ (14th century) ← Vulg. Ar. **lāzūrd* ← *lāzawārd* ← Pers. *lā(d)zward* ‘lapis lazuli’;
- *cor-de-laranja* ‘orange’ (16th century) < *laranja* ‘orange (fruit)’ ← Hispanic Ar. *naraṅga* ← Ar. *nāranġ* ← Pers. *nārang* ← Sanskr. *nāraṅga*.

⁶ We have intentionally omitted the other adjective that exists in European Portuguese to denominate the red colour, namely *encarnado*, as it is not the basic one and it constitutes a European Portuguese lexical innovation (Brazilian Portuguese does not use it at all). See Silvestre, Villalva & Pacheco (2014).

colour adjective	
1 st attestation	
etymology	
derivatives & compounds that refer to this colour	
etymologically related words that do not refer to this colour	
Polish / Portuguese words containing the same PIE root or one of its variants	
references	

All the information that we have gathered comes from well-established references that have been selected to provide possibly the most complete information related to this twelve adjectives. Most of these references are from etymological dictionaries and other sources providing reliable reconstructions of Proto-Slavic and Latin words, as well as Proto-Indo-European formations and roots (Boryś SEJP, Snoj SES, EDSIL, DCECH, DELP₁, DELP₂, HP, DELL, IEW, LIV; see References)⁷.

Even though the analysis of the data has been carried out upon contemporary colour adjectives, the presentation of the results will go in the opposite direction, starting from PIE roots. This will ensure a better legibility of the information and it will also help to clearly demonstrate the common past of Polish and Portuguese.

We will now consider five Polish roots and five Portuguese roots separately, since they do not share the same etymon. Finally, we will consider one colour adjective that has the same origin in both languages.

POLISH ADJECTIVES

As previously stated, we will consider five adjectives (black, grey, red, green and yellow). Four of them have no Portuguese cognates (i.e. *czarny*, *szary*, *zielony* and *czerwony*); the other one (i.e. *żółty*) does have a Portuguese cognate, though it is not a colour name (i.e. *fel* 'bile'). Consider a more detailed information on each of these roots.

⁷ We do not provide all forms and modifications because of the lack of information in the sources or in order to keep the reasoning clear.

The first set regards adjectives that have no Portuguese cognates:

czarny 'black'	
1 st attestation	15 th century
etymology	PIE <i>*kers-</i> 'black, dark, dirty' > <i>*kr̥s-</i> > <i>*kr̥sno-</i> → <i>*k̥rsno-</i> 'black, dark' → PS <i>*č̣rn̥</i> 'very dark, black' → Pol. czarny 'black'
derivatives & compounds that refer to this colour	czerni _{Nf} 'black', czarno _{Adv} 'blackly', czernieć _v 'to blacken, turn black', oczerniać _v 'to blacken, denigrate'
etymologically related words that do not refer to this colour	NONE
references	Boryś SEJP s.v. <i>czarny</i> Snoj SES s.v. <i>č̣rn̥</i> EDSIL: 92 IEW: 583 IEL: https://lrc.la.utexas.edu/lex/master/o945
szary 'grey'	
1 st attestation	15 th century
etymology	PIE <i>*kei(h)-</i> 'dark colour: brown, grey' > <i>*kei̯ro-</i> > <i>*ko̯iro-</i> → <i>*choi̯ro-</i> → PS <i>*ch̥r̥</i> 'of the colour of ash, grey' → Occid. PS <i>*šar̥</i> → Pol. szary 'grey'
derivatives & compounds that refer to this colour	szarość _{Nf} 'grey, greyness', szaro _{Adv} 'greyly', szarzeć _v 'to grey' metaphorical derivatives: szaruga _{Nf} 'long period of rainy weather', szarówka _{Nf} 'dusk'
etymologically related words that do not refer to this colour	PIE <i>*kei(h)-</i> > <i>*kei̯do-</i> > <i>*ko̯ido-</i> → <i>*choi̯do-</i> → PS <i>*ch̥d̥</i> → Occid. PS <i>*šad̥</i> 'grey' → Old Pol. <i>szady</i> > 1) Pol. szadź _{Nf} 'hard rime' (because of the greyish colour of the hard rime), 2) Old Pol. <i>szedziwy</i> → Pol. sędziwy _{Adj} 'aged, hoar' PIE <i>*kei(h)-</i> > <i>*kih̥uo-</i> > <i>*k̥i̯uo-</i> → PS <i>*siv̥</i> 'greyish' → Pol. siwy _{Adj} 'grey (especially about hair), hoar' PIE <i>*kei(h)-</i> > <i>*kih̥njo-</i> > <i>*k̥injo-</i> → PS <i>*sinj̥</i> 'blue' → Pol. siny _{Adj} 'blue, livid'
references	Boryś SEJP s.v. <i>szary</i> , s.v. <i>szadź</i> , s.v. <i>siwy</i> , s.v. <i>siny</i> , s.v. <i>sędziwy</i> Snoj SES s.v. <i>siv̥</i> EDSIL: 451–452 IEW: 540–541 IEL: https://lrc.la.utexas.edu/lex/master/o866
zielony 'green'	
1 st attestation	15 th century
etymology	PIE <i>*ǵ^helh-</i> 'to shine', also naming bright colours > <i>*ǵ^helh₃eno-</i> → PS <i>*zelen̥</i> 'green' → Pol. zielony 'green'
derivatives & compounds that refer to this colour	zieleń _{Nf} 'green', zielono _{Adv} 'greenly', zielenieć _v 'to turn green', zielenina _{Nf} 'vegetables', ziele _{Nn} 'herb', zióło _{Nn} 'herb'
etymologically related words that do not refer to this colour	PIE <i>*ǵ^helh-</i> > <i>*ǵ^holh₃-</i> > <i>*ǵ^holh₃to-</i> → PS <i>*zolt̥</i> 'golden' 1) → Pol. złoty _{Adj} 'golden', 2) > PS <i>*zolto₃</i> 'gold' → Pol. złoto _{Nn} 'gold'

references	Boryś SEJP s.v. <i>zielony</i> , s.v. <i>ziele</i> , s.v. <i>zióło</i> , s.v. <i>złoty</i> Snoj SES s.v. <i>zelēn</i> , s.v. <i>zēl</i> , s.v. <i>zlāt</i> EDSIL: 541–542, 547 IEW: 429–434 IEL: https://lrc.la.utexas.edu/lex/master/0637
<i>czerwony</i> ‘red’	
1 st attestation	15 th century
etymology	PIE <i>*k^uru-</i> ‘worm, maggot’ → <i>*kīruǵ</i> → PS <i>*čьrvь</i> ‘worm, larva of insects’ > (<i>*čьrviti</i> ‘to lay eggs (of insects); to dye red’ >) <i>*čьrvenъ</i> ‘tinted with maggot, red’ → Pol. <i>czerwony</i> ‘red’
derivatives & compounds that refer to this colour	<i>czerwień</i> _{Nf} ‘red, redness’, <i>czerwono</i> _{ADV} ‘redly’, <i>czerwienić</i> (<i>się</i>) _v ‘to make red’; ‘to turn red; to blush’, <i>zaczzerwienienie</i> _{Nm} ‘reddening, rubefaction’
etymologically related words that do not refer to this colour	PIE <i>*k^uru-</i> → <i>*kīruǵ</i> → PS <i>*čьrvь</i> → Pol. <i>czerw</i> _{Nm} ‘worm, larva of insects’ > <i>czerwiec</i> _{Nm} ‘June’ (period when worms appear most or when most insects producing red dye are caught) PIE <i>*k^urmi-</i> → <i>*kīrmī</i> → PS <i>*čьrmь</i> ‘worm, maggot’ > <i>*čьrmьnъ</i> ‘tinted with maggot, red’ → Dial. Pol. <i>czermy</i> ‘red’
references	s.v. <i>czerwony</i> , s.v. <i>czerw</i> , s.v. <i>czerwiec II</i> Snoj SES s.v. <i>črŭ</i> EDSIL: 91–94 IEW: 649

Three contemporary Polish adjectives (i.e. *czarny*, *szary* and *zielony*) originate from two PIE roots that also referred to a colour. The meanings of other words related to these roots result from association to a dark colour or a bright one, too, a fact that seems not to need further explanation.

The Polish adjective *czerwony* ‘red’ has a metonymical origin, which refers to the raw matter used to produce the pigment that yields the colour red.

The second set regards adjectives that have Portuguese cognates:

<i>żółty</i> ‘yellow’	
1 st attestation	15 th century
etymology	PIE <i>*g^helh-</i> ‘to shine’, also naming bright colours > <i>*g^helh₃to-</i> → <i>*g^hlto-</i> → <i>*ǵlto-</i> → PS <i>*žьltъ</i> ‘yellow’ → Pol. <i>żółty</i> ‘yellow’
derivatives & compounds that refer to this colour	<i>żółć</i> _{Nf} ‘yellowness; bile’, <i>żółto</i> _{ADV} ‘yellowly’, <i>żółknąć</i> _v ‘to turn yellow’, <i>żółtko</i> _{Nn} ‘yolk’

etymologically related words that do not refer to this colour	<p>PIE <i>*g^helh₃</i> - > <i>*g^hel(H)ũ-</i> → PS <i>*žely</i>, Gen. <i>*žьlъve</i> 'turtle' → Pol. <i>żółw</i>_{Nm} 'turtle' (because of the colour of turtle's shell)</p> <p>PIE <i>*g^helh₃</i> - > <i>*g^hl̥-</i> > <i>*g^hl̥nā-</i> → <i>*gīlnā</i> → PS <i>*žьlna</i> 'bee-eater' → Pol. <i>żółna</i>_{Nf} 'bee-eater' (because of the colour of the feathers on a bee-eater's throat)</p> <p>PIE <i>*g^helh₃</i> - > <i>*g^hleh₃d^hũ-</i> 'shining, smooth' → PS <i>*glad̥s</i> 'plain, smooth' > 1) <i>*glad̥sk̥s</i> → Pol. <i>gładki</i>_{Adj} 'plain, smooth', 2) <i>*gladiti</i> 'to make plain, smooth' → Pol. <i>gładzić</i>_v 'to stroke, smooth'</p> <p>PIE <i>*g^helh₃</i> - > <i>*g^hlend^(h)-</i> 'to shine, look' > PS. <i>*gl̥dati</i> (<i>*gl̥d̥ēti</i>) 'to look' > <i>*o(b)gl̥dati</i> → Pol. <i>ogłqdać</i>_v 'to watch, see, look'</p>
Portuguese words containing the same PIE root or one of its variants	<p>PIE <i>*g^hel-</i> > Lat. <i>fel</i>, Gen. <i>fellis</i> (← <i>*fel-n-is</i>) 'bile' (maybe of dialectal origin because of the presence of <i>f-</i>) → Port. <i>fel</i>_{Nm} 'bile' (because of the colour of this liquid)</p>
references	<p>Boryś SEJP s.v. <i>żółty</i>, s.v. <i>żółć I</i>, s.v. <i>żółć II</i>, s.v. <i>żółknąć</i>, s.v. <i>żółw</i>, s.v. <i>żółna</i>, s.v. <i>gładki</i>, s.v. <i>gładzić</i>, s.v. <i>ogłqdać</i></p> <p>Snoj SES s.v. <i>ž̑lt̑</i>, s.v. <i>ž̑l̑č̑</i>, s.v. <i>ž̑l̑va</i>, s.v. <i>ž̑l̑na</i>, s.v. <i>gl̑diti</i>, s.v. <i>gl̑dati</i></p> <p>EDSIL: 162–164, 557, 565–566</p> <p>IEW: 429–434</p> <p>IEL: https://lrc.la.utexas.edu/lex/master/o637</p> <p>LIV: 200</p> <p>DELP₁ s.v. <i>fel</i></p> <p>DELP₃ s.v. <i>fel</i></p> <p>HP: 109</p> <p>DCECH s.v. <i>hiel</i></p> <p>DELL s.v. <i>fel</i></p>

The same root is present in animal names (in Polish) and its variant occurs in the denomination of bile (in Portuguese), a fact that can be explained by their effective colour. In the other words (Pol. *gładki*, *gładzić*, *ogłqdać*), the idea of shining is preserved.

It is worth noting that the names for green and yellow have similar remote origin not only in Polish, but also in other Slavic languages; cf. the synonymous roots **g^helh₃*- and **g^helh₃*- that Pokorný and other authors consider as variants of the same root (e.g. IEW 429–434). It is thus possible that initially, they were merely perceived as bright colours and no further distinction seems to be available at this time.

PORTUGUESE ADJECTIVES

The set of five Portuguese adjectives that we have studied is not identical to the Polish set: the root for grey has been excluded and we have added the root for purple. The remaining adjectives refer to the same colours (i.e. green, yellow, black and red). Two of these adjectives have no Polish cognates (i.e. *verde*

and *amarelo*); the other three (i.e. *preto*, *vermelho* and *roxo*) do have Polish cognates, though, again, they are not all colour names (i.e., respectively *prać* ‘wash, launder, beat’; and *wierzba* ‘willow’). The exception is *roxo* that does have a colour cognate, but the colour is not the same (i.e. *rudy* ‘red, ginger, rufous’). Consider more detailed information on each of these roots.

The first set regards adjectives that have no Polish cognates:

verde ‘green’	
1 st attestation	10 th century
etymology	PIE <i>*ueis-</i> ‘to sprout, grow, flourish’ > Lat. <i>uirēre</i> ‘to be green’ > <i>uiridis</i> ‘green’ → Port. verde ‘green’
derivatives & compounds that refer to this colour	esverdear _v ‘to turn green’, reverdecer _v ‘to become green again’, esverdeado _{ADJ} ‘greenish’, verdejante _{ADJ} ‘green; verdant’, verdura _{Nf} ‘green vegetable’, verdete _{Nm} ‘verdigris’
etymologically related words that do not refer to this colour	NONE
references	DELP, s.v. <i>verde</i> DELP ₃ s.v. <i>verde</i> DCECH s.v. <i>verde</i> DELL s.v. <i>uireō</i> IEW: 1133 LIV: 671–672 IEL: https://lrc.la.utexas.edu/lex/master/2123
amarelo ‘yellow’	
1 st attestation	12 th century
etymology	PIE <i>*om-</i> ‘raw, coarse, bitter’ > Lat. <i>amārus</i> ‘bitter’ > <i>*amarellus</i> ‘bitterish’ → Port. amarelo ‘yellow’
derivatives & compounds that refer to this colour	amarelar _v ‘to yellow’, amarelado _{ADJ} ‘yellowish, pale’, amarelecer _v ‘to become yellow’, amarelecido _{ADJ} ‘yellowish, old’, amarelecimento _{Nm} ‘yellowness’
etymologically related words that do not refer to this colour	PIE <i>*om-</i> > Lat. <i>amārus</i> ‘bitter’ > Hisp. Lat. <i>*amaricus</i> → Port. amargo _{ADJ} ‘bitter’
references	DELP, s.v. <i>amarelo</i> , s.v. <i>amargo</i> DELP ₃ s.v. <i>amarelo</i> , s.v. <i>amargo</i> HP: 43 DCECH s.v. <i>amarillo</i> , s.v. <i>amargo</i> DELL s.v. <i>amārus</i> IEW: 777–778 IEL: https://lrc.la.utexas.edu/lex/master/1418

Both these roots, that originally had no reference to colour, have scarcely been productive in Latin and even less in Portuguese. Besides Portuguese *amargo*, they have left no semantic continuance. The names of green and yellow result from different metaphors: the meaning ‘green’ comes from the idea of growth

and vitality (characteristic to plants) and the meaning ‘yellow’ originates from the association to the bitterness of bile.

The second set regards adjectives that have Polish cognates:

<i>preto</i> ‘black’	
1 st attestation	13 th century
etymology	PIE <i>*per-</i> ‘to hit, strike’ > <i>*pr-</i> > <i>*pret-</i> > Lat. <i>pressus</i> ‘pressed, tightened’ → <i>*prettus</i> → Port. <i>preto</i> ‘black’
derivatives & compounds that refer to a colour	NONE
etymologically related words that do not refer to this colour	PIE <i>*per-</i> > <i>*pr-</i> > <i>*prem-</i> > Lat. <i>premere</i> ‘to press’: 1) → Port. <i>premer</i> / <i>premir</i> _V ‘to press, oppress’ 2) > <i>pressa</i> ‘pressed’ → Port. <i>pressa</i> _{NF} ‘hurry, haste’ > a) <i>depressa</i> _{ADV} ‘quickly’ b) <i>apressar</i> _V ‘to rush, hurry, hasten’ PIE <i>*per-</i> > <i>*pr-</i> > <i>*pret-</i> > Lat. <i>pressus</i> ‘pressed, tightened’ → <i>*prettus</i> → Port. <i>perto</i> _{ADV} ‘near, close’
Polish words containing the same PIE root or one of its variants	PIE <i>*per-</i> > <i>*pr-</i> > PS <i>*p̥rati</i> ‘beat, trample, wash’ → Pol. <i>prać</i> _V ‘to wash, launder, beat’ (because of the ancient way of doing laundry by hitting clothes with a stick) PIE <i>*per-</i> > PS <i>*perun̥s</i> → Pol. <i>piorun</i> _{Nm} ‘thunderbolt, lightning’ (the one who hits, strikes)
references	DELP ₁ s.v. <i>preto</i> ³ , s.v. <i>premer</i> , <i>premir</i> , s.v. <i>pressa</i> , s.v. <i>depressa</i> , s.v. <i>perto</i> DELP ₁ s.v. <i>preto</i> , s.v. <i>premer</i> , s.v. <i>pressa</i> , s.v. <i>perto</i> DCECH s.v. <i>prisa</i> DELL s.v. <i>premo</i> IEW: 818–819 LIV: 473 IEL: https://lrc.la.utexas.edu/lex/master/1494 EDSIL: 427–428 Boryś SEJP s.v. <i>prać</i> , s.v. <i>piorun</i> Snoj SES s.v. <i>práti</i>
<i>vermelho</i> ‘red’	
1 st attestation	13 th century
etymology	PIE <i>*u̯er-</i> ‘to turn, bend, writhe’ > <i>*u̯r-</i> > <i>*u̯rmi-</i> ‘worm, maggot’ → Lat. <i>uermis</i> ‘worm’ > <i>uermiculus</i> ‘small worm’ → Port. <i>vermelho</i> ‘red’
derivatives & compounds that refer to a colour	<i>avermelhar</i> _V ‘to turn red’, <i>avermelhado</i> _{ADJ} ‘reddish’, <i>vermelhidão</i> _{NF} ‘redness’

etymologically related words that do not refer to this colour	<p>PIE <i>*uer-</i> > <i>*ur-</i> > <i>*urmi-</i> 'worm, maggot' → Lat. <i>uermis</i> 'worm' → Port. verme_{Nm} 'worm'</p> <p>PIE <i>*uer-</i> > <i>*uert-</i> > Lat. <i>uerture</i> 'to turn':</p> <p>1) → Port. verter_v 'to pour'</p> <p>2) > <i>uersus</i> 'furrow, line, row, verse' → Port. verso_{Nm} 'verse'</p> <p>3) > <i>diuerture</i> 'to turn away, go away':</p> <p>a) → Port. divertir_v 'to amuse, entertain'</p> <p>b) > <i>diuersus</i> 'turned into opposite or different directions' → Port. diverso_{ADJ} 'diverse'</p> <p>4) > <i>aduertere</i> 'to turn towards' > <i>aduersus</i> 'turned towards' → Port. avesso_{ADJ} 'reverse'</p> <p>5) > <i>inuertere</i> 'to return, reverse' > <i>inuersus</i> 'reversed' > <i>*inuerse</i> → Port. invés_{Nm} 'opposite side'</p>
Polish words containing the same PIE root or one of its variants	<p>PIE <i>*uer-</i> > <i>*uerb-</i> > PS <i>*v̥rba</i> → Pol. wierzba_{Nf} 'willow' (because of slenderness of a willow's twigs)</p> <p>PIE <i>*uer-</i> > <i>*uerg-</i> → PS <i>*vergti</i> 'to throw' > <i>*v̥rgati</i> → wierzgać_v 'to kick, to suddenly move the legs'</p> <p>PIE <i>*uer-</i> > <i>*uerg^h-</i> 'to twist, bend, bind, tie' > PS <i>*po-verzti</i> 'to tie, bond' > <i>*poverslo</i> 'binder' → Pol. powrósto_{Nm} 'binder, wisp'</p> <p>PIE <i>*uer-</i> > <i>*uerk-</i> 'to twist, bind' > <i>*urenk-</i>_{Nm} 'to pick up, gather' > <i>*uronkah</i> → PS <i>*rōka</i> → Pol. ręka_{Nf} 'hand, arm'</p> <p>PIE <i>*uer-</i> > <i>*uerk^h-</i> 'to twist, bend, bind, tie' > PS <i>*versō</i> → Pol. wrzos_{Nm} 'heather' (heather was used for braiding different objects) > wrzesień_{Nm} 'September' (period when heathers are in blossom)</p> <p>PIE <i>*uer-</i> > <i>*uert-</i> 'to turn, twist' > <i>*uerteno-</i> → PS <i>*verteno</i> → Pol. wrzeciono_{Nm} 'spindle'</p>
references	<p>DELP₁ s.v. <i>vermelho</i>, s.v. <i>verme</i>, s.v. <i>verter</i>, s.v. <i>verso</i>, s.v. <i>divertir</i>, s.v. <i>diverso</i>, s.v. <i>avesso</i>, s.v. <i>invés</i></p> <p>DELP₃ s.v. <i>vermelho</i>, s.v. <i>verme</i>, s.v. <i>verter</i>, s.v. <i>verso</i>, s.v. <i>divertir</i>, s.v. <i>avesso</i></p> <p>HP: 324–326</p> <p>DCECH s.v. <i>bermejo</i>, s.v. <i>verter</i></p> <p>DELL s.v. <i>uermis</i>, s.v. <i>uerbēna</i>, s.v. <i>uerbera</i>, s.v. <i>uertō</i>, s.v. <i>uergō</i></p> <p>IEW: 1152–1160</p> <p>LIV: 688, 691–692</p> <p>IEL: https://lrc.la.utexas.edu/lex/master/2156, https://lrc.la.utexas.edu/lex/master/2157, https://lrc.la.utexas.edu/lex/master/2159, https://lrc.la.utexas.edu/lex/master/2160, https://lrc.la.utexas.edu/lex/master/2161, https://lrc.la.utexas.edu/lex/master/2163</p> <p>EDSIL: 439–440, 515–516</p> <p>Boryś SEJP s.v. <i>wierzba</i>, s.v. <i>wierzgać</i>, s.v. <i>powrósto</i>, s.v. <i>wrzos</i>, s.v. <i>wrzesień</i>, s.v. <i>ręka</i>, s.v. <i>wrzeciono</i></p> <p>Snoj SES s.v. <i>v̥rba</i>, s.v. <i>povréslo</i>, s.v. <i>vrzěl</i>, s.v. <i>rěsa</i>, s.v. <i>róka</i>, s.v. <i>vretěno</i></p>
roxo 'purple'	
1 st attestation	13 th century
etymology	<p>PIE <i>*reud^h-</i> 'red' > <i>*rud^h-</i> > <i>*rud^hto-</i> / <i>*rud^hso-</i> → Lat. <i>russus</i> 'redhead, red' > <i>russeus</i> 'dark red' → Port. roxo 'purple'</p>
derivatives & compounds that refer to a colour	arroxear _v 'to turn purple', arroxeado _{ADJ} 'purplish'
etymologically related words that do not refer to this colour	<p>PIE <i>*reud^h-</i> > <i>*rud^h-</i> > <i>*rud^hro-</i> → Lat. <i>ruber</i> 'red' > <i>rubeus</i> 'red, ginger, rufous' → ruivo_{ADJ} 'redhead'</p>

Polish words containing the same PIE root or one of its variants	<p>PIE <i>*reud^h-</i> > <i>*rud^h-</i> > <i>*rud^ho-</i> → PS <i>*rēdō</i> ‘red’ > <i>*rēdja</i> ‘redness’ → Pol. <i>rdza</i>_{Nf} ‘rust’</p> <p>PIE <i>*reud^h-</i> > <i>*rud^h-</i> > <i>*rud^hro-</i> → PS <i>*rēdrō</i> ‘reddish, rufous, russet’ > <i>*rēdrōstō</i> → Pol. <i>rdest</i>_{Nm} ‘knotweed, knotgrass, <i>Polygonum</i>’</p> <p>PIE <i>*reud^h-</i> > <i>*roud^h-</i> > <i>*roud^ho-</i> → PS <i>*rudō</i> ‘red, reddish’:</p> <p>1) → Pol. <i>rudy</i>_{ADJ} ‘red, ginger, rufous’</p> <p>2) > <i>*ruda</i> ‘something red; red dy mud, earth’ → Pol. <i>ruda</i>_{Nf} ‘ore’</p> <p>PIE <i>*reud^h-</i> > <i>*roud^h-</i> > <i>*roud^hmōn-</i> → PS <i>*rumēnō</i> → Pol. <i>rumiany</i>_{ADJ} ‘ruddy, rubicund’</p> <p>PIE <i>*reud^h-</i> > <i>*roud^h-</i> > <i>*roud^hso-</i> → PS <i>*rustō</i> ‘reddish, ginger’ → Old Pol. <i>rusy</i>_{ADJ} ‘ginger, rufous’</p> <p>PIE <i>*reud^h-</i> > <i>*rūd^h-</i> > PS <i>*rydjō</i> ‘red-yellow, bright rufous’ → Pol. <i>rydz</i>_{Nm} ‘red pine mushroom, <i>Lactarius deliciosus</i>’</p>
references	<p>DELP₁ s.v. <i>roxo</i>, s.v. <i>ruivo</i>^f</p> <p>DELP₃ s.v. <i>roxo</i>, s.v. <i>ruivo</i></p> <p>HP: 255–256</p> <p>Silvestre, Villalva & Pacheco 2014</p> <p>DCECH s.v. <i>rojo</i>, s.v. <i>rubio</i></p> <p>DELL s.v. <i>rūssus</i>, s.v. 1^o <i>ruber</i>, s.v. 2^o <i>rubeō</i>, s.v. <i>rūfus</i>, s.v. <i>rōbus</i>, s.v. <i>rōbur</i></p> <p>IEW: 872–873</p> <p>LIV: 508–509</p> <p>IEL: https://lrc.la.utexas.edu/lex/master/1631</p> <p>EDSIL: 440</p> <p>Boryś SEJP s.v. <i>rudy</i>, s.v. <i>ruda</i>, s.v. <i>rdza</i>, s.v. <i>rdest</i>, s.v. <i>rydz</i>, s.v. <i>rumiany</i>, s.v. <i>ryży</i></p> <p>Snoj SES s.v. <i>rděti</i>, s.v. <i>rúda</i>, s.v. <i>rjä</i>, s.v. <i>ruměn</i>, s.v. <i>rūs</i>^f</p>

Quite surprisingly, the PIE root **reud^h-* is well preserved both in Portuguese and in Polish, where it continues its original meaning in adjectives naming similar colours (purple and rufous), but also in various objects and plants whose characteristic feature is that of being of one of these colours. The other two roots are present in Portuguese colour names through a metaphor (*preto*) and a metonymy (*vermelho*); it is curious that an identical metonymy (‘maggot producing red dye’ > ‘red colour’) stands behind the Portuguese and Polish names of the colour red, even if these names are not akin. Moreover, Polish and Portuguese vocabularies comprise many words that continue, more or less directly, the primitive significations of roots **per-* and **uer-*.

Polish and Portuguese ‘white’

We have found just one PIE root that refers to the same colour in Polish and Portuguese. Its original meaning of ‘shiny, white’ is preserved in both languages,

though the phonetic output does not immediately reveal their etymological closeness (cf. *biały* vs. *branco*).

	<i>biały</i> 'white'	<i>branco</i> 'white'
1 st attestation	15 th century	13 th century
etymology	PIE <i>*b^helH-</i> > <i>*b^hēlH-</i> > <i>*b^hēlHo-</i> → PS <i>*bēl̥</i> 'white, bright' → Pol. <i>biały</i> 'white'	PIE <i>*b^helH-</i> > <i>*b^hl-</i> > <i>*b^hleg-</i> / <i>*b^hleḡ-</i> 'to shine' > Germanic <i>*blank</i> 'bright, shiny' → Port. <i>branco</i> 'white'
derivatives & compounds that refer to a colour	<i>biel</i> _{Nf} 'white', <i>bielić</i> _V 'to whiten, bleach', <i>biało</i> _{Adv} 'whitely', <i>bielmo</i> _{Nn} 'endosperm; leukoma', <i>białko</i> _{Nn} 'albumen; protein'	<i>branquear</i> _V 'to whiten', <i>branqueamento</i> _{Nm} 'whitening', <i>esbranquiçar</i> _V 'to become whitish', <i>esbranquiçado</i> _{Adj} 'whitish'
etymologically related words that do not refer to this colour	PIE <i>*b^helH-</i> > <i>*b^holH-</i> > <i>*b^holHnā-</i> → PS <i>*bolna</i> 'membrane, sapwood' → Pol. <i>blona</i> _{Nf} 'membrane, film' (sapwood is usually light-coloured) PIE <i>*b^helH-</i> > <i>*b^holH-</i> > <i>*b^holHnio-</i> → PS <i>*boln̥je</i> 'wet meadow, clearing' → Pol. <i>blonie</i> _{Nn} 'large pasture, meadow' (whitish area, maybe due to the bright colour of the clay or because of being covered by cotton grass – <i>Eriophorum</i>) PIE <i>*b^helH-</i> > <i>*b^hōlH-</i> > <i>*b^hōlto-</i> → PS <i>*bolto</i> 'swamp' → Pol. <i>bloto</i> _{Nn} 'mud' (the same motivation as in <i>blonie</i>)	PIE <i>*b^helH-</i> > <i>*b^hl-</i> > <i>*b^hleg-</i> / <i>*b^hleḡ-</i> 'to shine' > Lat. (? <i>*flagma</i> →) <i>flamma</i> → Port. <i>chama</i> _{Nf} 'flame' PIE <i>*b^helH-</i> > <i>*b^hl-</i> > <i>*b^hlg-</i> / <i>*b^hlḡ-</i> 'to shine' > Lat. <i>fulgēre</i> / <i>fulgēre</i> → Port. <i>fulgir</i> _V 'to blaze, glisten, glow, shine'
references	Boryś SEJP s.v. <i>biały</i> , s.v. <i>blona</i> , s.v. <i>blonie</i> , s.v. <i>bloto</i> Snoj SES s.v. <i>běl</i> , s.v. <i>bláto</i> EDSIL: 40, 52–54 DELP ₁ s.v. <i>branco</i> , s.v. <i>chama</i> , s.v. <i>fulgir</i> DELP ₃ s.v. <i>branco</i> , s.v. <i>chama</i> , s.v. <i>fulgir</i> HP: 60 DCECH s.v. <i>blanco</i> , s.v. <i>llama I</i> DELL s.v. <i>fulgō</i> , s.v. <i>fulix</i> IEW: 118–120, 124–125 LIV: 86 IEL: https://lrc.la.utexas.edu/lex/master/o214	

The same root (in different variants and by different paths) has given the name of the colour white in both languages; the metaphor was the idea of brightness. It is also present in some other words: in Polish they are motivated by the colour, whereas in Portuguese by the idea of shining.

Summary and outlook

The knowledge of Indo-European colour names is not as straightforward as would be considered. According to PIE Lexicon drawn from Julius Pokorny's

Indogermanisches etymologisches Wörterbuch (IEL: <https://lrc.la.utexas.edu/lex/semantic/field/SP>), the set of colours lexically represented in PIE comprises white, black, red, blue, green and yellow, and a generic category for light colours as well as another one for dark colours, but each of these colour categories is associated to several roots.

It is, thus, to be expected to find diverging selections having been made by different languages, especially if they belong to different sub-families, which is the case of Polish and Portuguese. The data that we have analysed is of a very limited dimension, but it allows us to document different paths. Some colour names correspond to the evolution of PIE colour names – ‘white’ is our best example, since the same IE root yields the Polish and the Portuguese equivalents.

It is interesting to note that some Polish and Portuguese words, somehow related to ‘white’, derive from PIE roots that meant ‘white’:

IE root	Polish	Portuguese
* <i>alb^ho-</i> ‘white, albino’	<i>łabędź</i> _{Nm} ‘swan’	<i>alvo</i> _{ADJ} ‘white, clean’
* <i>ar(e)ǵ-</i> ‘white, argent, glittering’	NONE	<i>argila</i> _{Nf} ‘clay’; <i>argêteo</i> _{ADJ} ‘silvery’ (borrowings)
* <i>b^helH-</i> ‘glittering white’	<i>biały</i> _{ADJ} ‘white’	<i>branco</i> _{ADJ} ‘white’
* <i>b^herh₂ǵ-</i> ‘to shine; bright, white’	<i>brzoza</i> _{Nf} ‘birch’	<i>freixo</i> _{Nm} ‘ash (tree)’
* <i>kas-</i> ‘grey’	NONE	<i>cãs</i> _{NfPl} ‘white hair’

In the case of red, the central IE root (i.e. *reud^h-*) has provided colour words both in Polish and Portuguese, but they are not the basic terms for red in any of these languages. Curiously, both languages adopted a similar metonymical procedure: they selected different IE roots meaning ‘worm’ as a basis to the words meaning ‘red’:

IE root	Polish	Portuguese
* <i>reud^h-</i> ‘red’	<i>rudy</i> _{ADJ} ‘red, ginger, rufous’	<i>roxo</i> _{ADJ} ‘purple’
* <i>k₂rmī-</i> ‘grub, worm, maggot’	<i>czerwony</i> _{ADJ} ‘red’	NONE
* <i>uer-</i> ‘to turn, bend, writhe’ > * <i>urmi-</i> ‘worm, maggot’	see above	<i>vermelho</i> _{ADJ} ‘red’

Polish words for ‘black’ and ‘grey’ proceed from IE colour roots. These roots have not yielded colour names in Portuguese, but one of the semantically equivalent IE colour roots has provided words in Portuguese and Polish that somehow relate to those colours by referring to ‘darkness’.

IE root	Polish	Portuguese
* <i>kers-</i> ‘black, dirty; dark colour’	<i>czarny</i> _{ADJ} ‘black’	NONE
* <i>kei(h)₁-</i> ‘dark colour: brown, grey’	<i>szary</i> _{ADJ} ‘grey’	NONE
* <i>temH-</i> ‘dark’	<i>ciemny</i> _{ADJ} ‘dark’, <i>ćma</i> _{NF} ‘moth’	<i>trevas</i> _{NEPL} ‘darkness’

Neither Polish nor Portuguese have preserved any of the IE roots for ‘green’⁸ or for ‘yellow’⁹: Polish adopted two related roots that referred to bright colours and, based on them, developed two divergent forms for ‘yellow’ and ‘green’. Portuguese took a metaphoric option for ‘green’ (the colour of a sprout) and also for ‘yellow’ (the colour of bitter).

IE root	Polish	Portuguese
* <i>ǵ^het₃h-</i> ‘to shine, glow; gold, yellow, bright colour’	<i>zielony</i> _{ADJ} ‘green’	NONE
* <i>ǵ^helh₃-</i> ‘to shine, glow; gold, yellow, bright colour’	<i>żółty</i> _{ADJ} ‘yellow’	see above
* <i>ueis-</i> ‘to grow, sprout’	NONE	<i>verde</i> _{ADJ} ‘green’
* <i>om-</i> ‘raw, coarse, bitter’	NONE	<i>amarelo</i> _{ADJ} ‘yellow’

Finally, let it be mentioned that Pokorny lists three roots that could refer to the colour blue, but none of them having been conserved either in Polish or in Portuguese as the basic name of this colour – Polish utilises the derivative *niebieski*, while in Portuguese the Arabism *azul* is used. Nevertheless, they have left some words somehow related to this colour:

⁸ Pokorny lists the following: **d^halh₁-* ‘to bloom, be green’; **ǵ^hrē-/ǵ^hrō-/ǵ^hrə-* ‘to grow, become green’; **ǵ^hālō-* ‘raw, unripe’; **kēko-* ‘green grass, fodder’.

⁹ Pokorny lists the following: **bad₁ō-* ‘bay, brown; gold, yellow’; **b^hlend^h-* ‘dim, pale, blond, reddish’; **b^hleuō-* ‘a light colour (blue, yellow)’; **k_enəkó-* ‘golden, honey-coloured’.

IE root	Polish	Portuguese
<i>b^hleu-</i> ‘a light colour (blue, yellow)’	NONE	<i>flavo</i> _{ADJ} ‘golden, yellow, fawn’ (borrowing)
* <i>mod^hro-</i> ‘blue; madder’	<i>modry</i> _{ADJ} ‘deep blue’	NONE
*(s) <i>li-</i> ‘livid, bluish’	<i>śliwa</i> _{Nf} ‘plum tree’, <i>śliwka</i> _{Nf} ‘plum’	<i>livido</i> _{ADJ} ‘livid’ (borrowing)

A general conclusion resulting from our material is that it is interesting to see the semantic evolution of PIE roots and their presence in both languages. It turns out that some names of colours come from a basis that denoted some undefined hues, simply bright (Pol. *biały* and Port. *branco* ‘white’, Pol. *zielony* ‘green’, *żółty* ‘yellow’) or dark ones (Pol. *czarny* ‘black’, *szary* ‘grey’). However, other PIE roots, that have nothing to do with colours, are also present and allowed us to discover some curious metaphors and metonymies that have occurred during their development (Port. *preto* ‘black’, *verde* ‘green’, *amarelo* ‘yellow’). In one case, there is a semantic parallel in the independent development: even if the origin of the adjectives for ‘red’ is not the same (Pol. *czerwony* and Port. *vermelho*), the metonymy ‘maggot producing red dye’ > ‘red dye, red colour’ is the same both in Polish (and generally Slavic) and Portuguese (and generally Ibero-Romance) languages. This can be a sign of a common cultural past: it is possible that insects and their larvae were used for the production of red dye on a scale larger than a regional one.

Comparing both languages, as far as names of colours are concerned, we can tell that Polish is more conservative, while Portuguese has more innovative, metaphorically based denominations. Nevertheless, both still show traces of a common remote past.